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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,435	12/22/2000	Paul A. Puniello	174-771	8909

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EXAMINER

DAVIS, ROBERT B

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,435

Applicant(s)

PUNIELLO ET AL.

Examiner

Robert B. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 29-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-12, 14-18, 20-25, 36 and 37 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 13, 19, 26, 27, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-28 and 36-39 in Paper No. 7 (June 19, 2003) is acknowledged.
2. Claims 29-35 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Drawings

3. Figures 1 and 2A-2C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 27 and 36 are objected to because of the following informalities:

The preamble of claim 27 recites "The split vent pin of claim 14", but claim 14 recites in the preamble "An injection mold for producing golf balls". The preamble of claim 27 should be amended to recite "The injection mold of claim 14". For reasons of patentability claim 27 is being handled as the injection mold of claim 14 wherein the face of at least one pin section is roughened to allow air and gases to pass therethrough when the first and second pin sections are joined.

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In regards to claim 36, the claim recites "a vent pin having at least a portion of a plurality of dimples on the face of the pin". It is suggested that applicant amend this limitation to recite "a vent pin having a plurality of projections on the face of the pin for forming at least a portion of a plurality of dimples in the golf ball." Claim 36 is being examined as if a plurality of dimple forming projections is located on the tip of the pin. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-5 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano (5,874,116: figures 3, 4 and 6, column 1, lines 18-37, column 2, lines 60-67 and column 3, lines 1-59).

Takano teaches a vent pin (3) for an injection mold (1) comprising a plurality of pin sections (3a, 3b) that join to define the vent pin, the pin sections having faces that join to define at least on primary vent (a2) along the inside of the vent pin, a secondary vent (4), and a second primary vent (a1) along the outer portion of the vent pin. The

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inner primary vent (a2) and the outer primary vent (a1) are connected by a passage (5). The vent pin has a secondary vent (4) as well as the remainder of the outer section of the vent pin sections, which serves as an outer secondary vent. The language in the preamble of claim 1 "for a golf ball injection mold" is intended use and not entitled any weight as none of the structure of claim 1 distinguishes the pin from a venting pin for a mold.

7. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Schultz (2,378,586: figures 1-4).

Schultz teaches a venting pin (18) for an injection mold (10, 11) comprising a plurality of pin sections (20) which are joined to form a primary vent (21) and the vent pin having a secondary vent (22) on the inside of the pin.

8. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese reference (1-301219: figures 1 and 3-10).

The Japanese reference (-219) teaches a venting pin (9) comprised of opposing sections (11, 12) having a primary vent (11b, 12b) and a secondary vent formed by the flat faces (11a, 12a) on the inside of the pin.

9. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Wieder (6,367,765: figures 1, 3 and 4).

Wieder teaches a venting pin (42) for a mold comprising: first and second split sections (102, 104) which are joined to form a primary vent grate (70) having a plurality of openings (110 see figures 8 and 9), a secondary vent passage (72), and a second secondary vent passage (100 see figure 5) along the outside of the pin (42).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 14, 16-18 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (5,879,599: figures 1 and 2; and column 1, line 41 to column 2, line 8) taken together with Takano.

Inoue discloses an injection mold for forming a golf ball comprising opposing plates (A, B) having a cavity (7) shaped define a substantial spherical cavity of a golf ball, wherein the plates meet at a parting line (P), and a vent pin (1) disposed in the mold cavity for venting air and gases from the mold cavity. The reference does not

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disclose a split venting pin; however, the reference does discuss at length the problems caused by slow venting through holes provided in the mold at fast injection speeds.

Takano discloses an injection mold having a split venting pin as discussed supra which provides venting between the two split pin sections and along the outer portion of the venting pin to allow faster venting of the cavity to prevent short shots due to residual air or gases located in the mold cavity.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Inoue by using a split venting pin as disclosed by Takano for the purpose of increasing the throughput of the vent by providing a venting pin which has primary vents along the split surface and the outer surface of the pin to prevent mold defects accompanied with improper venting of an injection mold.

13. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (-599) taken together with Wieder.

Inoue discloses an injection mold with a vent pin as discussed supra, but fails to disclose or suggest a split venting pin having a plurality of openings in the top of the pin.

Wieder discloses a venting pin having a split grate having a plurality of venting openings as discussed supra. Wieder discloses using a split grate having a plurality of openings which increases the surface area of the vent for overcoming venting related defects that occur due to poor venting as discussed from line 32 of column 1 to line 8 of column 2.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Inoue by using a pin having a split grate with a

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plurality of openings as disclosed by Wieder for the purpose of increasing the vent surface area to prevent venting related defects.

14. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (-599) taken together with Japanese reference (1-301219).

Inoue discloses an injection mold having all claimed features except for a split venting pin and in the case of claim 20 one of the split pin sections having a flat face.

The Japanese reference discloses an injection mold having a split venting pin (9), which has flat surfaces (11a, 12a). The use of the split venting pins allows for the product to be formed without the formation of pinholes.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of Inoue by using a split venting pin having flat surfaces as disclosed by Japanese reference (1-301219) for the purpose of preventing pin holes caused by improper venting.

15. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (figures 1 and 2A) taken together with Inoue (5,849,237: figure 6).

The admitted prior art discloses an injection mold for forming a golf ball having a venting pin (figure 2A) having a plurality of primary vents (24) and secondary vents (26) formed along the outside surface of the pin. The specification also states that if the layer being formed in the injection mold is a cover then the vent pin forms the dimple. The admitted prior art does not disclose that vent pin has a plurality of dimple forming projections on the tip of the pin.

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Inoue (-237) discloses a venting pin (8) having a plurality of dimple forming projections (9) on the surface of the pin (8).

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of the admitted prior art by providing a plurality of projections on the tip of the venting pin as disclosed by Inoue (-237) for the purpose of forming the venting pin of sufficient size to adequately vent the mold cavity. It would have been further obvious in regards to claim 37 to provide four such projections on the venting pin as determined by routine experimentation by one of ordinary skill in the art in determining the required venting surface area.

Allowable Subject Matter

16. Claim 28 is allowed over the prior art of record.
17. Claims 6, 7, 13, 19, 26, 27, 38 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
18. The following is a statement of reasons for the indication of allowable subject matter: In regards to claims 6, 19 and 38, none of the prior art of record teaches or suggests a split venting pin wherein the pin is shaped to form a plurality of dimples in the cover of a golf ball. The closest prior art (Takano) discloses a split pin, but the pin is flat faced. A number of single dimple forming non-split pins are known in the art as shown by the admitted prior art, Stiefel (5,890,975 column 3, lines 1-6) and Japanese reference 8-300403, but none of these suggest splitting a pin and adding a plurality of projections thereon to form a plurality of dimples. Inoue (-237) discloses a porous plug

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(8) having a plurality of dimple forming projections (9), but the reference does not disclose or suggest a split venting pin having a plurality of dimple forming projections. In regards to claims 26 and 28, none of the prior art of record teaches or suggests an injection mold having a split retractable pin having pin section faces that are joined to define a primary vent at the tip of the pin. The closest prior art (Inoue -237) discloses porous support or ejector pins (column 3, line 64 to column 4 line 7), but the reference neither discloses or suggests the split retractable pins as claimed.

In regards to claim 7, none of the prior art of record teaches or suggests a pin having a first section that has a cutout channel and an opposing flat surfaced section for forming the primary vent. Shultz shows opposing cutout faces. Japanese reference 1-301219 discloses opposed flat surfaces. However, neither discloses or suggests the combination of a flat faced and a cutout face on opposing faces of a split venting pin.

In regards to claims 13 and 27 none of the prior art teach or suggest a split venting pin wherein the face of one pin section is roughened to allow venting.

Conclusion

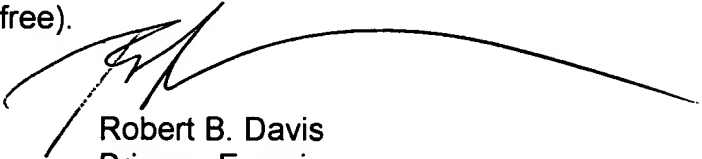
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references show the state of the art in mold venting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert B. Davis
Primary Examiner
Art Unit 1722

2/20/04